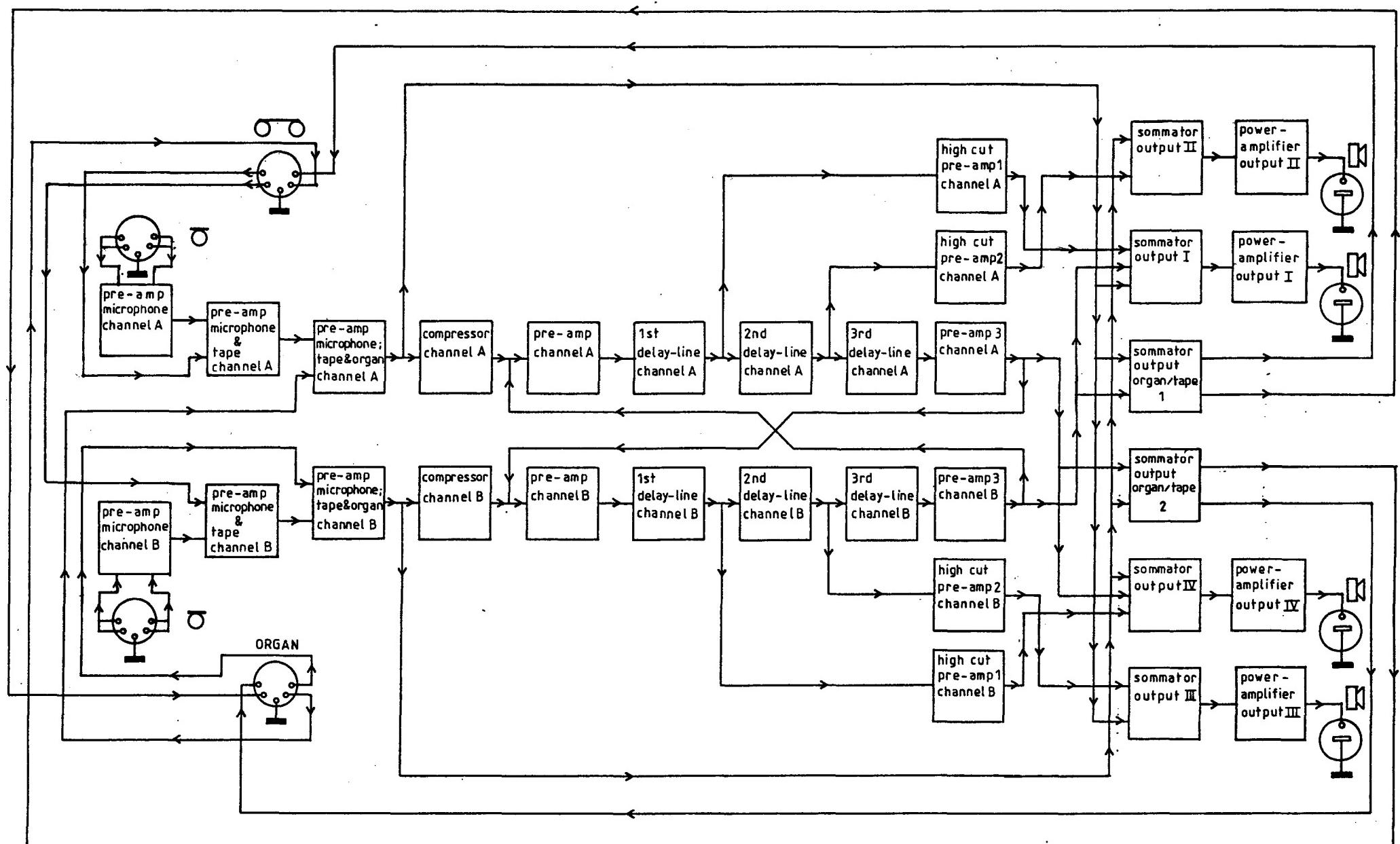


= = = = =
= S C H E M A T I C D I A G R A M S =
= J O H A N N U S =
= 4 - C H A N N E L A C O U S T I C S =
= = = = =
alterations reserved

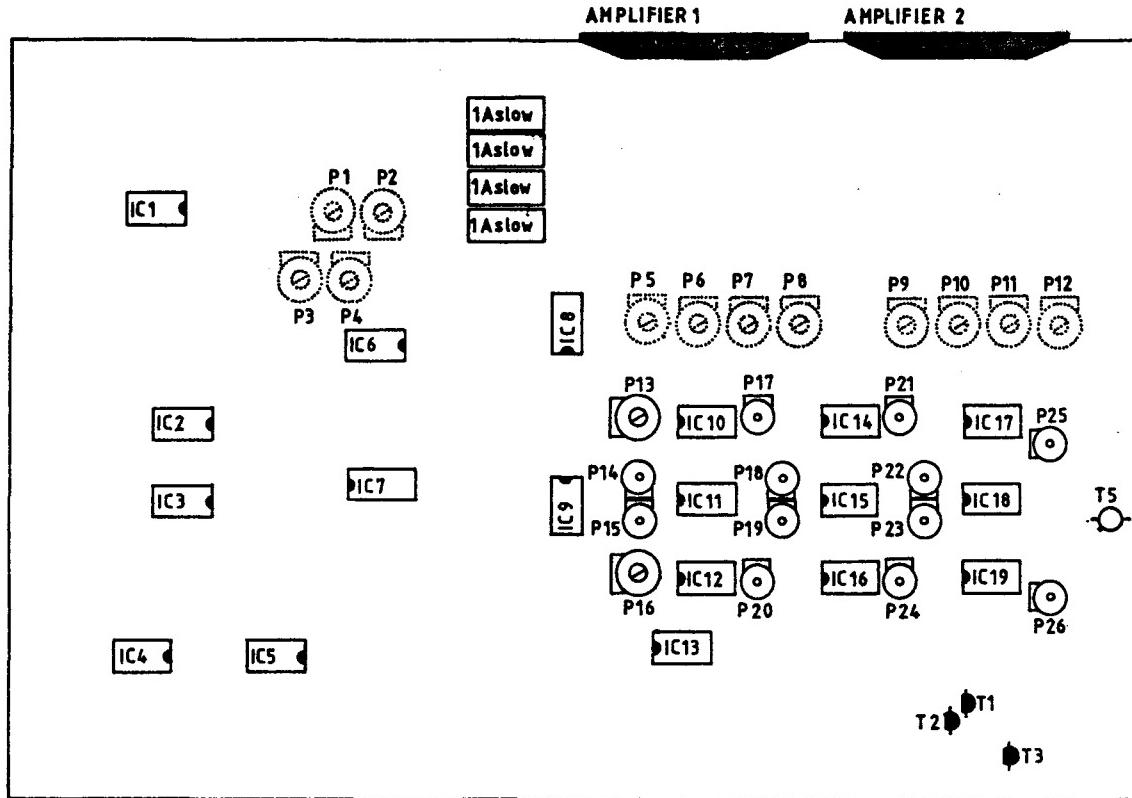
C O N T E N T S

- PAGE 1 BLOCKDIAGRAM
- PAGE 2 POSITIONDIAGRAM & ADJUSTMENTS
- PAGE 3 POWER SUPPLY
- PAGE 4 INPUT-CIRCUIT
- PAGE 5 DELAYLINE
- PAGE 6 OUTPUT-CIRCUIT (I & II)
- PAGE 7 OUTPUT-CIRCUIT (III & IV)
- PAGE 8 GEN. INFO SEMI-CONDUCTORS



BLOCKDIAGRAM 4-CHANNEL ACOUSTICS

Drawn Verschoor	Date 19-04-85	Modified DESIGN	Date	JOHANNUS ORGELBOUW b.v.
				morsestraat 28 6716 AH EDE HOLLAND Tel. 08380-37403



P1=amplitude output-signal to organ channel1 by using a taperecorder or microphone
 P2=amplitude output-signal to organ channel2 by using a taperecorder or microphone
 P3=amplitude input-signal channel A from organ
 P4=amplitude input-signal channel B from organ
 P5=bass adjustment loudspeaker-signal audio-output4
 P6=treble adjustment loudspeaker-signal audio-output4
 P7=bass adjustment loudspeaker-signal audio-output3
 P8=treble adjustment loudspeaker-signal audio-output3
 P9=bass adjustment loudspeaker-signal audio-output2
 P10=treble adjustment loudspeaker-signal audio-output2
 P11=bass adjustment loudspeaker signal audio-output1
 P12=treble adjustment loudspeaker-signal audio-output1
 P13=amplitude feedbacksignal channel A to channel B
 P14=adjustment DC-offset input pre-amp channel A (IC9)
 P15=adjustment DC-offset input pre-amp channel B (IC9)
 P16=amplitude feedbacksignal channelB to channelA
 P17=elimination clockripple 1st delay-line channelA (IC10)
 P18=adjustment DC-offset input 2nd delay-line channelA (IC14)
 P19=adjustment DC-offset input 2nd delay-line channelB (IC16)
 P20=elimination clockripple 1st delay-line channelB (IC12)
 P21=elimination clockripple 2nd delay-line channelA (IC14)
 P22=adjustment DC-offset input 3rd delay-line channelA (IC17)
 P23=adjustment DC-offset input 3rd delay-line channelB (IC19)
 P24=elimination clockripple 2nd delay-line channelB (IC16)
 P25=elimination clockripple 3rd delay-line channelA (IC17)
 P26=elimination clockripple 3rd delay-line channelB (IC19)

T 1;2;3;4=BC549

T 5=BC 141

IC 1=TL074

IC 2;3;4;5;6;8;9;13=LM747

IC 7 = NE 570

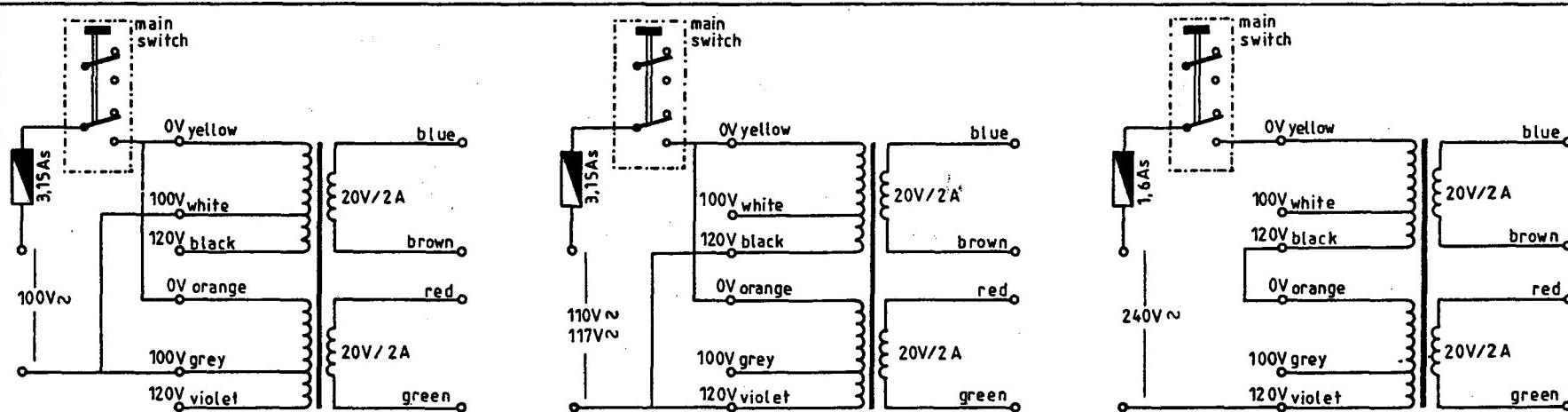
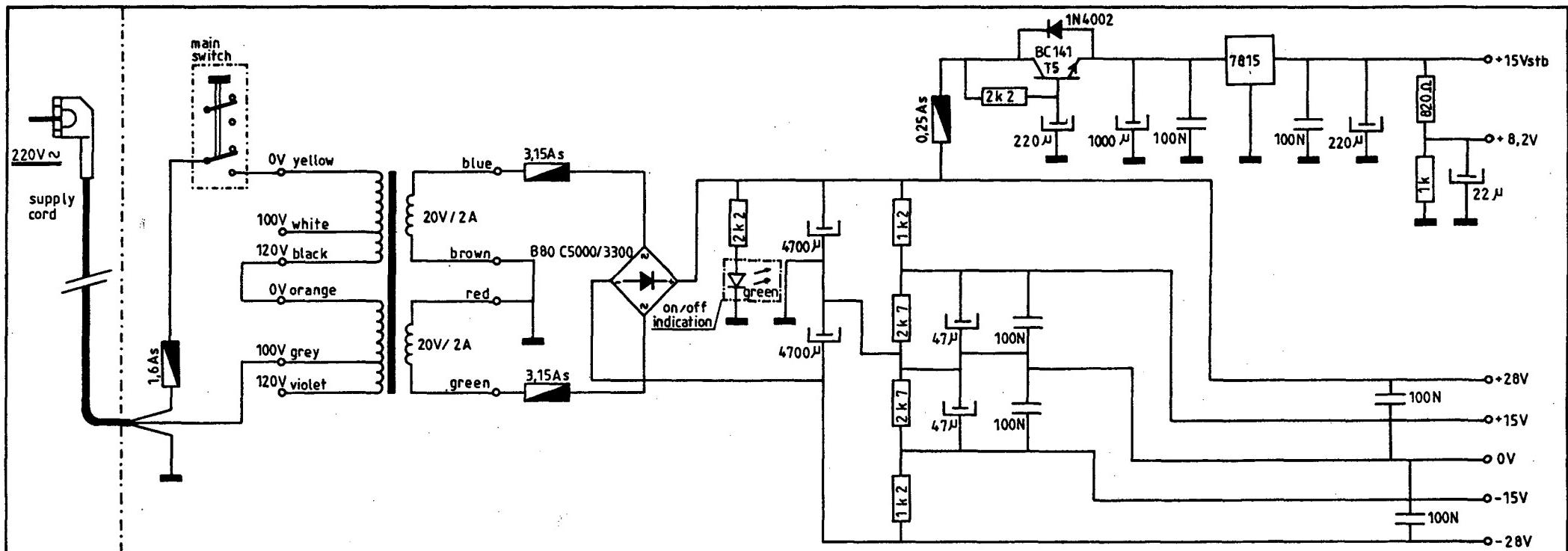
IC 10;12;14;16;17;19 = TDA 2108

IC 11 15 18= HEF 4013

POSITIONDIAGRAM & ADJUSTMENTS

4 - CHANNEL ACOUSTICS

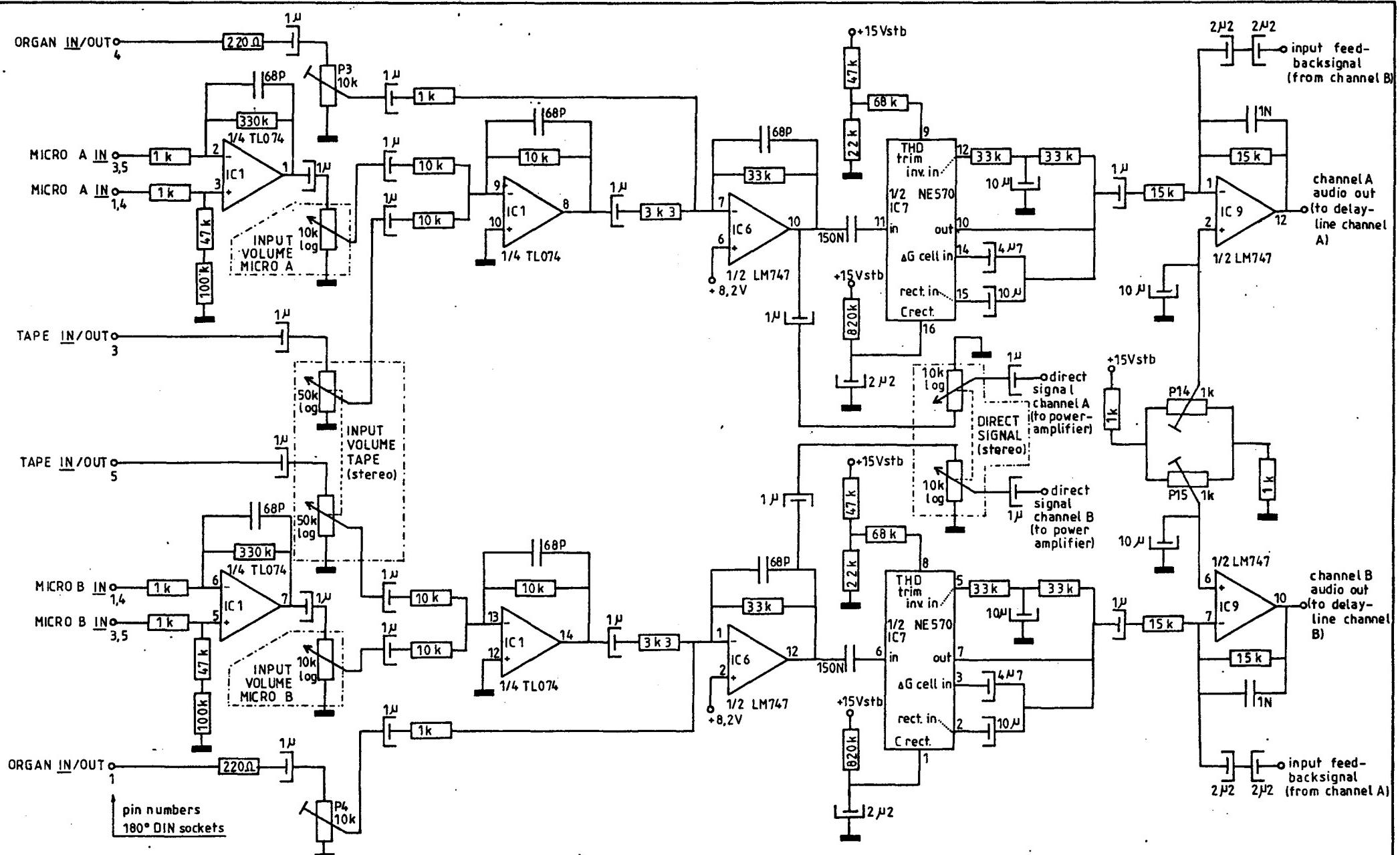
Drawn	Date	Modified	Date	JOHANNUS ORGAN
Verschoor	12-04-85			
DESIGN				
copyright: ELECTRONIUM B.V.	JOHANNUS ORGELBOUW b.v.	morsestraat 28 6716 AH EDE HOLLAND Tel. 08380-37403	page: 2	



TRANSFORMER CONNECTIONS FOR COUNTRIES WITH OTHER VOLTAGES

POWER SUPPLY 4-CHANNEL ACOUSTICS

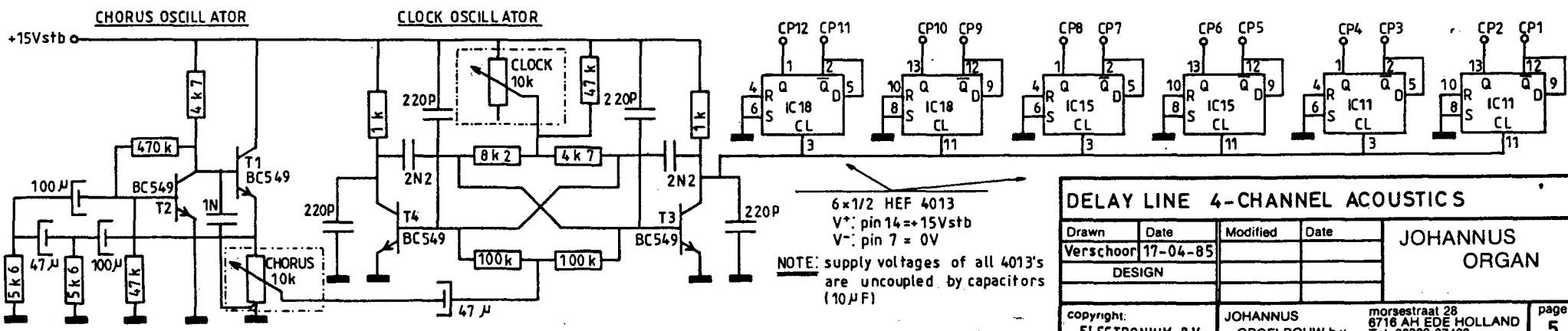
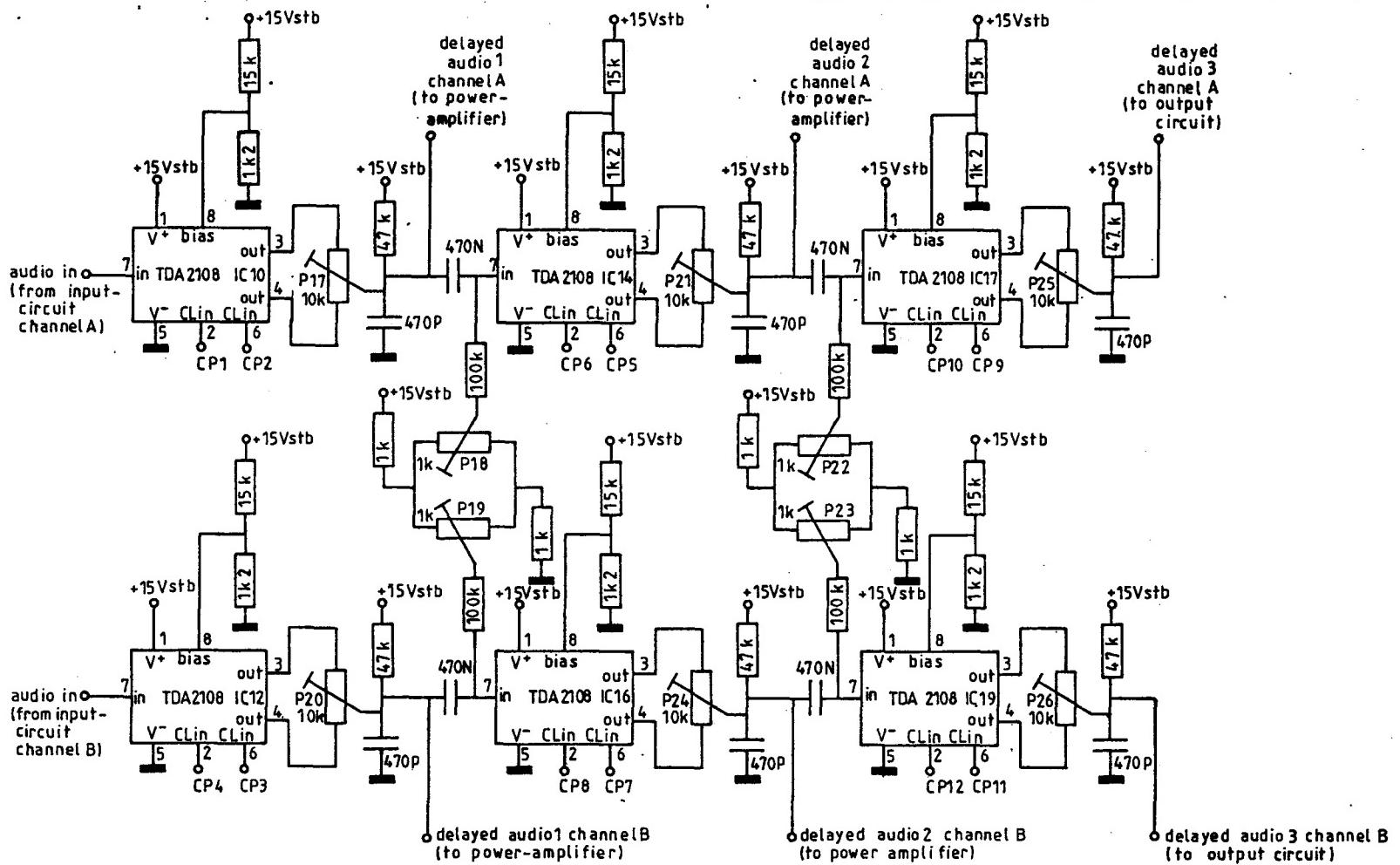
Drawn	Date	Modified	Date	JOHANNUS
Verschoor	12 - 04 - 85	Verschoor	18 - 07 - 85	ORGELBOUW b.v.
DESIGN				
copyright: J. VERSTEEGT	JOHANNUS ORGELBOUW b.v.	morsestraat 28 6716 AH EDE HOLLAND	Tel. 06380-37403	page: 3

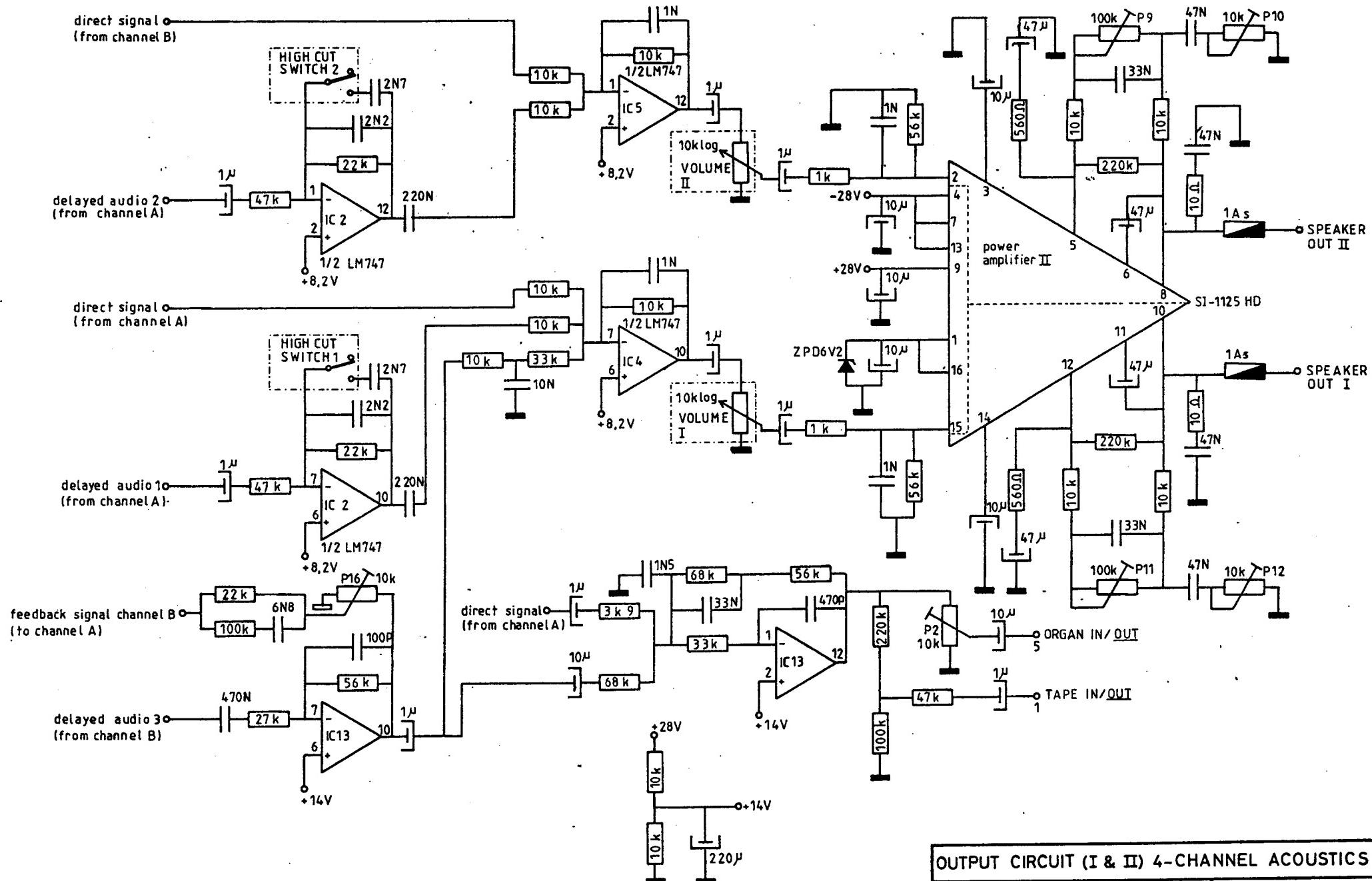


SUPPLY VOLTAGES IC's: IC1: pin 4 = +15V & pin 11 = -15V
IC6: pin 9,13 = +15Vstb & pin 4 = 0V
IC7: pin 13 = +15Vstb & pin 4 = 0V
IC9: pin 9,13 = +15Vstb & pin 4 = 0V

INPUT CIRCUIT 4-CHANNEL ACOUSTICS

Drawn	Date	Modified	Date	JOHANNUS ORGAN
Verschoor	15-04-85			
DESIGN				





OUTPUT CIRCUIT (I & II) 4-CHANNEL ACOUSTICS

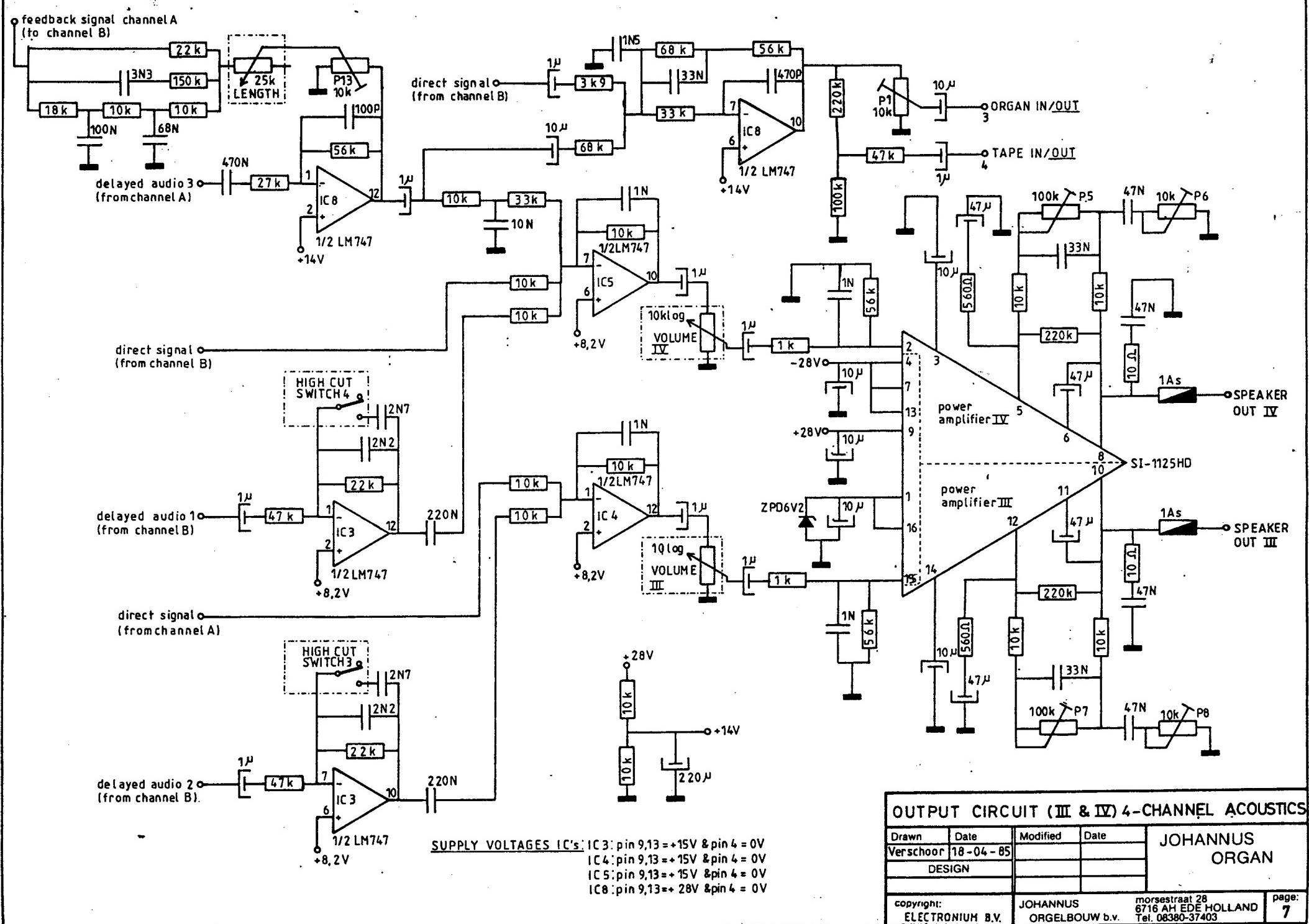
Drawn	Date	Modified	Date
Verschoor	18-04-85		
DESIGN			

JOHANNUS
ORGAN

copyright:
ELECTRONIUM B.V.

JOHANNUS
ORGELBOUW b.v.

morsestraat 28
6716 AH EDE HOLLAND
Tel. 08380-37403



OUTPUT CIRCUIT (III & IV) 4-CHANNEL ACOUSTICS

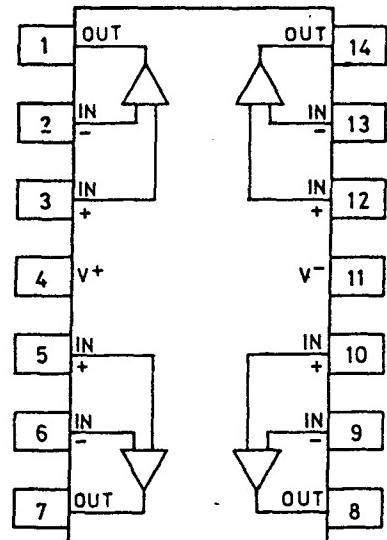
Drawn	Date	Modified	Date	JOHANNUS ORGAN
Verschoor	18-04-85			
DESIGN				
copyright: ELECTRONIUM B.V.		JOHANNUS ORGELBOUW b.v.	morsestraat 28 6716 AH EDE HOLLAND Tel. 08380-37403	page: 7

A —— K
1N4002
ZPD6V2

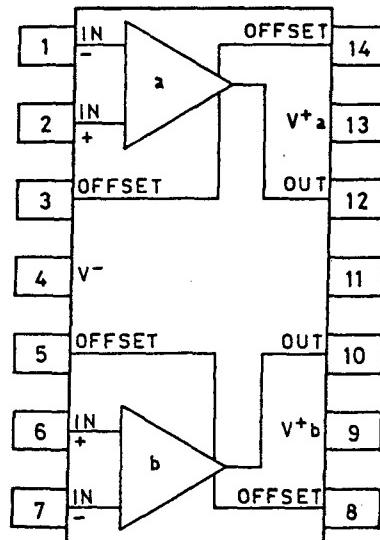
A —— K
LED (green)
(bottomview)

E B C
BCS49
(bottomview)

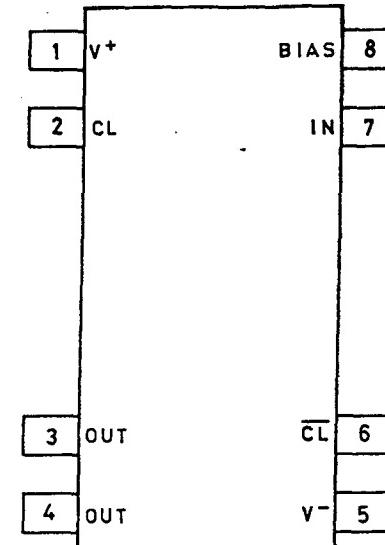
E C
BC 141
(bottomview)



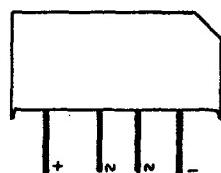
TL074: quad opamp
LM324: quad opamp



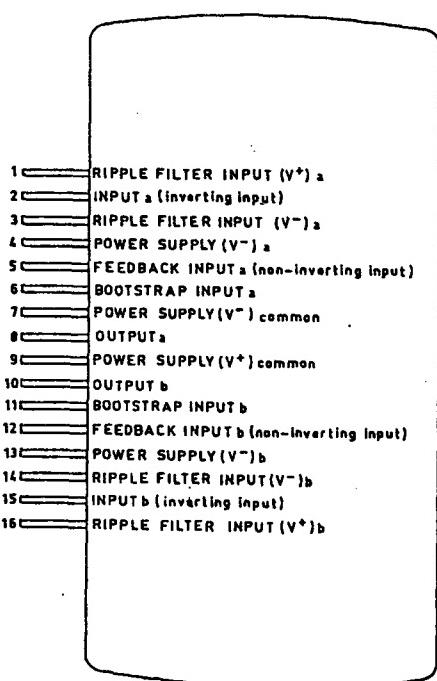
μA747: dual opamp



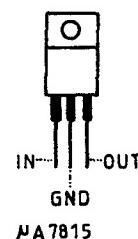
TDA 2108: delay line



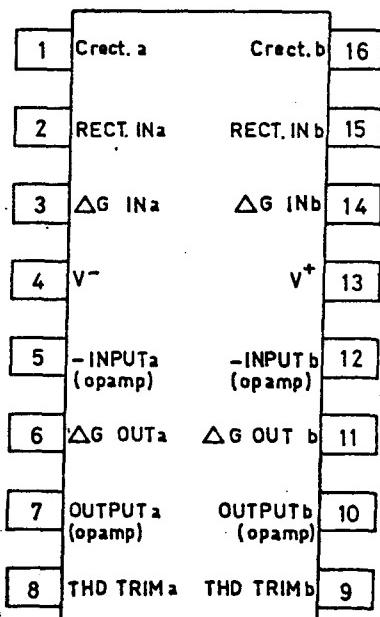
B 80 C5000/3300



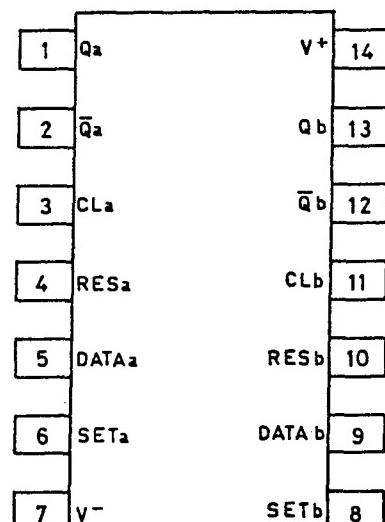
SI-1125 HD: stereo hybrid audio power amplifier



μA7815



NE 570: dual compandor



4013: dual D-flip-flop

GEN. INFO SEMI-CONDUCTORS 4-CHANNEL ACOUSTICS

Drawn	Date	Modified	Date	JOHANNUS ORGAN
Verschoor	19-04-85			
				DESIGN
copyright: ELECTRONIUM B.V.				morsestraat 28 6716 AH EDE HOLLAND Tel. 08380-37403
				page: 8